

REMARKS/DISCUSSION OF ISSUES

Claims 1-8 are pending in the application. Claims 1-8 are rejected.

Claims 1-3 are currently amended. Since these amendments are intended to advance prosecution by placing the claims in better form for allowance, and do not raise issues which would require further consideration or search, Applicant respectfully requests that these amendments be entered by the Examiner.

The Examiner's acceptance of the drawings and acknowledgement of receipt of the claim for priority and the priority documents is noted with appreciation.

Claims 1-4, 6 and 8

Claims 1-4, 6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Born et al. U.S. patent 6,137,230 (herein 'Born').

Born discloses a metal halide lamp containing sodium iodide (NaI). See, for example, col. 1, line 7. The Examiner has taken the position that the term 'halogen' in Applicant's claim 1 can include halides such as NaI.

The clear meaning of the term 'halogen' is a halogen in the elemental or atomic form, while the term 'halide' clearly refers to a compound of a halogen and another element, such as sodium iodide, which is a compound of iodine, which is a halogen, and sodium.

While the filling of Applicant's lamp is expressed in terms of elemental zinc and elemental halogen, it is clear from Applicant's disclosure that at least some of the zinc and halogen is present as a compound of zinc and halogen. See, for

example, page 2, lines 11 and 28 of Applicant's specification.

Thus, in order to clarify the scope of Applicant's invention, claim 1 is currently amended to call for at least a portion of the zinc and at least a portion of the halogen to be present as zinc halogenide.

In addition, claim 1 is currently amended to state that the filling 'consists essentially of' instead of 'comprises ... only' the filling constituents. The use of the term 'consists essentially of' is well-established to include only the stated constituents together with minor amounts of inactive substances such as unintended impurities. See, for example, MPEP 2111.03.

Claim 2 is currently amended to render its terminology consistent with claim 1, and claim 3 is currently amended to correct a typographical error.

Since Born requires the presence of NaI, and Applicant's claims exclude NaI, Born fails to anticipate the rejected claims as currently amended, and the rejection under 35 USC 102(b) is in error and should be withdrawn.

Claim 5

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Born in view of Hadeishi et al. U.S. patent 4,941,743 (herein 'Hadeishi').

Hadeishi discloses a high stability, high intensity atomic emission light source for use in atomic absorption spectroscopy. Hadeishi's lamp has electrodes and sophisticated temperature-controlling means.

Thus, Hadeishi's lamp is clearly in a different field of endeavor than are the conventional type of metal halide lamps disclosed by Born and Applicant.

Furthermore, Hadeishi clearly teaches that EDL's (electrodeless discharge lamps) are unacceptable due to their temperature instability. See col. 1, lines 7-16 and col. 3, lines 12-46.

Thus, Hadeishi clearly leads the skilled artisan away from electrodeless operation. Moreover, Hadeishi fails to teach anything with regard to electrodeless operation in the radio frequency range.

Even if Hadeishi could be said to suggest electrodeless operation in the radio frequency range for a lamp of the type claimed by Applicant, the combination would still fail because Born fails to teach or suggest a metal halide lamp without NaI.

For all of the above reasons, Born in view of Hadeishi fails to teach or suggest the subject matter of claim 5, and the rejection under 35 USC 103(a) is in error and should be withdrawn.

Claim 7

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Born in view of Caruso et al. U.S. patent 4,742,268 (herein 'Caruso').

Caruso discloses a metal halide lamp having a high calcium iodide partial pressure. The fill contains calcium iodide, thallium iodide and tin iodide.

In judging obviousness under Section 103, the entire teachings of the references must be considered for what they teach a person of ordinary skill in the art.

Caruso clearly teaches a lamp with a fill of calcium/thallium/tin iodide, while Born teaches a lamp with a fill of sodium iodide.

Not only are these two references inconsistent in this regard, but also they both fail to teach or suggest a lamp with a fill of zinc and a halogen, without the presence of other metals such as sodium, calcium, thallium or tin.

For the above reasons, Born in view of Caruso fails to teach or suggest the subject matter of claim 7, and the rejection under 35 USC 103(a) is in error and should be withdrawn.

Conclusion

In conclusion, Applicant respectfully requests that the Examiner withdraw the rejections of record, allow all the pending claims, and find the application to be in condition for allowance.

Respectfully submitted,



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